FLORIDA'S STEM UNIVERSITY"

# US News: 2020 Ed. Review 

Office of Institutional Research and Effectiveness• Fall 2019

## 2019 Edition and 2020 Edition Metrics

| Main Percent | Main | $\begin{array}{\|c\|} \hline \text { Sub } \\ \text { percent } \end{array}$ | Overall Rank Ranges (Average in Rank Range) | Florida Tech 2019 ED | Florida Tech 2020 ED | Change <br> Indicator |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall Rank |  |  |  | 177 | 202 | 25 |
| 5\% | Alumni Giving | 5\% | Average alumni giving rate (2 Year) | 6.1 | 6.5 | 0.4 |
| 27\% | Grad \& Retention Rates | 17.6\% | 6-year graduation rate (4 year average) | 57.5 | 58.8 | 1.3 |
|  |  | 4.4\% | Freshman retention rate (4 year average) | 79.5 | 80.8 | 1.3 |
|  |  | 2.5\% | Pell Grant Comparative Grad Rate | -5.0 | -11.0 | -6.0 |
|  |  | 2.5\% | Pell Grant Grad Rate | 56.0 | 51.0 | -5.0 |
| 8\% | Grad Rate Performance | 8\% | Graduation Rate Performance (Over/Under) | -1.0 | -1.0 | 0.0 |
| 10\% | Student Selectivity | 2.25\% | \% of freshmen in top 10 percent of high school class | 28.0 | 29.0 | 1.0 |
|  |  | 7.75\% | SAT Math average score | 625.0 | 633.0 | 8.0 |
|  |  |  | SAT Evidence-Based Reading \& Writing average score | 604.0 | 618.0 | - 14.0 |
|  |  |  | Internal Calculation SAT Combined | 1229.0 | 1251.0 | - 22.0 |
|  |  |  | ACT Composite average score | 27.0 | 28.0 | - 1.0 |
| 20\% | Expert Opinion | 15.0\% | Peer assessment score | 2.4 | 2.4 | 0.0 |
|  |  | 5.0\% | High school counselor score | 3.4 |  |  |
| 20\% | Faculty Resources | 1.0\% | \% of faculty who are full-time | 80.7 | 82.0 | 1.3 |
|  |  | 3.0\% | \% of full-time faculty with PhD or terminal degree | 92.2 | 90.8 | -1.4 |
|  |  | 8.0\% | Class Size Indicator Rank | 113.0 | 161.0 | - 48.0 |
|  |  | 7.0\% | Average Faculty Compensation (CY) | \$101,213 | \$110,052 | \$8,839 |
|  |  | 1.0\% | Student/faculty ratio | 15.0 | 14.0 | ) -1 |
| 10\% | Financial Resources | 10\% | Educational expenditures per student | \$26,403 | \$26,096 | -\$307 |
| Aggregated into Class Size Indicator |  |  | \% of classes with fewer than 20 students | 42.5 | 44.7 | 2.2 |
|  |  |  | \% of classes with 20-49 students | 50.4 | 50.9 | 0.5 |
|  |  |  | \% of classes with 50 or more students | 7.1 | 4.4 | - -2.7 |

## The Notables

- Remained constant or improved in 14 of 18 metrics areas
- Those areas make up $82 \%$ of the weighting
- Undergraduate Engineering improved to \#153 from \#167
- Ranked $2^{\text {nd }}$ in international student percentage among National Universities
- Ranked 113 in Student Excellence (internal metric) aggregate of test scores and top 10\% HS Rank

We Improved...So Whymid Ite Decline?

## Impact of Carneyie Classifification Change

- Institutions with professional doctorates were re-classified as National Universities
- Increased number of numerically ranked institutions from 226 to 281
- Increased number of institutions in National Universities category from 301 to 381
- 27 institutions were added that were ranked above Florida Tech including:
- Gonzaga University (79)
- Elon University (84)
- Valparaiso University (153)
- Missouri University of Science and Technology (179)
- University of North Carolina - Wilmington (185)
- Loyola University New Orleans (197)


## US News Methodology Changes

- Eliminated the HS Counselor rating as part of the peer assessment score (was worth 5\%)
- Increased weighting of peer assessment score to 20\%
- Repackaged Pell graduation rate \& gap into "social mobility indicator" with no weighting change
- Aligned student enrollment term and fiscal year in the educational expenditures per FTE student calculation
- Added percent first generation to the graduation rate predictive formula
- Adjusted faculty salary data to account for regional cost of living differences

| Main Percent | Main | $\begin{gathered} \text { Sub } \\ \text { percent } \end{gathered}$ | Overall Rank Ranges (Average in Rank Range) | 91 to 100 | 101 to 110 | 111 to 120 | 121 to 130 | 131 to 140 | 141 to 150 | 151 to 160 | 161 to 170 | 171 to 180 | 181 to 190 | 191 to 200 | lorida Tec | 201 to 210 | 211 to 220 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5\% | Alumni Giving | 5\% | Average alumni giving rate (2 Year) | 10.5 | 9.8 | 10.5 | 10.9 | 9.1 | 7.2 | 10.3 | 7.3 | 8.4 | 7.1 | 8.1 | 6.5 | 5.4 | 8.1 |
| 35\% | Grad \& Retention Rates | 17.6\% | 6 -year graduation rate (4 year average) | 76.1 | 70.7 | 68.4 | 73.4 | 69.0 | 68.5 | 67.7 | 64.7 | 58.3 | 64.7 | 66.2 | 58.8 | 62.6 | 58.5 |
|  |  | 4.4\% | Freshman retention rate (4 year average) | 88.9 | 87.8 | 87.1 | 85.6 | 85.5 | 84.7 | 84.7 | 83.8 | 81.2 | 83.0 | 81.6 | 80.8 | 79.9 | 79.6 |
|  | Grad Rate <br> Performance | 8\% | Graduation Rate Performance (Over/Under) | 3.7 | 5.7 | 2.3 | 1.5 | 3.6 | 6.7 | 1.6 | 3.9 | -0.5 | 2.9 | 2.5 | -1.0 | 5.0 | 2.8 |
|  | Social Mobility | 2.5\% | Pell Grant Comparative Grad Rate | -4.9 | -8.5 | -7.5 | -7.7 | -9.5 | -8.5 | -11.8 | -9.8 | -9.3 | -11.4 | -11.2 | -11.0 | -7.6 | -11.1 |
|  |  | 2.5\% | Pell Grant Grad Rate | 73.1 | 65.8 | 65.5 | 68.4 | 62.9 | 64.3 | 60.3 | 59.5 | 53.5 | 59.0 | 58.7 | 51.0 | 58.6 | 52.6 |
| 10\% | Student Selectivity | 2.25\% | \% of freshmen in top 10 percent of high school class | 44.0 | 31.0 | 37.3 | 34.0 | 26.4 | 29.3 | 25.6 | 24.3 | 24.6 | 30.5 | 19.3 | 29.0 | 18.0 | 18.4 |
|  |  | 7.75\% | SAT Math average score | 629.2 | 615.2 | 616.3 | 617.3 | 601.5 | 604.5 | 603.3 | 589.6 | 590.8 | 600.6 | 586.3 | 618.0 | 568.0 | 569.2 |
|  |  |  | SAT Evidence-Based Reading \& Writing average score | 639.8 | 614.6 | 633.5 | 615.3 | 602.6 | 604.2 | 598.1 | 584.3 | 599.8 | 591.0 | 566.7 | 633.0 | 558.4 | 560.7 |
|  |  |  | Internal Calculation SAT Combined | 1268.9 | 1229.8 | 1249.8 | 1232.6 | 1204.1 | 1208.7 | 1201.4 | 1173.8 | 1190.6 | 1191.6 | 1153.0 | 1251.0 | 1126.4 | 1129.9 |
|  |  |  | ACT Composite average score | 27.4 | 26.6 | 26.3 | 26.6 | 25.5 | 25.5 | 26.2 | 24.8 | 24.3 | 24.7 | 24.5 | 28.0 | 23.5 | 23.5 |
| 20\% | Expert Opinion | 20.0\% | Peer assessment score | 3.0 | 3.2 | 3.1 | 2.8 | 2.8 | 2.7 | 2.8 | 2.7 | 2.7 | 2.4 | 2.5 | 2.4 | 2.2 | 2.4 |
|  |  |  | High school counselor score | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 20\% | Faculty Resources | 1.0\% | \% of faculty who are full-time | 81.6 | 87.8 | 88.5 | 81.1 | 83.6 | 81.5 | 76.2 | 79.2 | 81.7 | 82.7 | 81.0 | 82.0 | 67.6 | 79.0 |
|  |  | 3.0\% | \% of full-time faculty with PhD or terminal degree | 90.3 | 86.4 | 89.7 | 86.7 | 88.1 | 89.2 | 83.7 | 87.0 | 87.9 | 82.6 | 83.4 | 90.8 | 80.7 | 82.0 |
|  |  | 8.0\% | Class Size Indicator Rank | 200.5 | 257.2 | 246.8 | 173.0 | 218.9 | 218.0 | 185.9 | 225.7 | 159.2 | 172.1 | 168.7 | 161.0 | 91.5 | 163.6 |
|  |  | 7.0\% | Average Faculty Compensation (CY) | \$157,678 | \$142,135 | \$142,933 | \$131,579 | \$127,967 | \$133,114 | \$124,259 | \$134,919 | \$136,387 | \$111,159 | \$108,024 | \$110,052 | \$121,574 | \$114,952 |
|  |  | 1.0\% | Student/faculty ratio | 13.2 | 15.8 | 15.1 | 14.5 | 14.7 | 17.0 | 15.3 | 16.3 | 14.1 | 14.3 | 14.1 | 14.0 | 13.4 | 15.6 |
| 10\% | Financial Resources | 10\% | Educational expenditures per student | \$36,543 | \$36,390 | \$32,543 | \$36,178 | \$34,951 | \$25,323 | \$34,693 | \$30,556 | \$41,121 | \$23,955 | \$25,224 | \$26,096 | \$23,919 | \$25,004 |

## What does the US News ranking data suggest?

- There are opportunities
- Benefits students
- Opportunity for long term positive impact
- Potential revenue generation
- There are challenges
- Changes are unpredictable and out of our control
- Few institutions have moved their rankings substantially
- Metrics need longer intervals until impact is seen
- Requires resources


# What May 

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## Discussione

## SOUREES AND DEFINITIONS

| Main Percent | Main | Sub-percent | Sub-metrics (Average in Rank Range) | Definition \& Source |
| :---: | :---: | :---: | :---: | :---: |
| 5\% | Alumni Giving | 5\% | Average alumni giving rate (2 Year) | Source - CAE VSE <br> Undergraduate Alumni Giving: As noted, exclude former students who earned only graduate degrees and undergraduates who didn't graduate from your institution. Additionally, exclude all student giving (e.g., senior class gift) unless you count the entire senior student body in the alumni of record total. <br> Please follow the standards set by the Council for Aid to Education (CAE) and the Council for Advancement and Support of Education (CASE), and used for reporting to CAE for the Voluntary Support of Education Survey when answering these questions. <br> What was the number of undergraduate alumni of record at your institution? (Alumni of record are former full or part-time students with an undergraduate degree from your institution and for whom you believe you have a valid address or other way to make contact (telephone, email, etc.)) |


| Main Percent | Main | Sub-percent | Sub-metrics (Average in Rank Range) | Definition \& Source |
| :---: | :---: | :---: | :---: | :---: |
| 27\% | Grad \& Retention Rates |  | 6-year graduation rate (4 year average) | The following questions ask for information needed to calculate the six-year graduation rate for the cohort of full-time, first-time, bachelor's (or equivalent) degree-seeking undergraduate students who entered your institution in the Fall of 2012. Include students who entered your institution during the Summer term preceding Fall of 2012. |
|  |  |  |  | Based off of entering cohort of first time, full-time bachelors degree seeking undergrad students including those who began in the preceding summer. |
|  |  |  |  | Allows cohort exclusions for death, permanent disability, armed forces, foreign aid service, or church mission. |
|  |  | 4.4\% | Freshman retention rate (4 year average) | Same as above by first cohort one year later. |
|  |  | 2.5\% | Pell Grant Comparative Grad Rate | Calculated metric - difference between grad rate and Pell grad rate |
|  |  | 2.5\% | Pell Grant Grad Rate | Is same as grad rate, but for Pell students only. Pell status is based on their status at time of cohort entry. |
| 8\% | Grad Rate Performance | 8\% | Graduation Rate Performance (Over/Under) | US News algorithm <br> 48.173+(.372* expenditures per student)+(.215* mean standardized test scores) $+\left(3.375^{*} 10^{\wedge}-6\right)^{*}($ mean standardized test score^3)+(.308*top 10\% class standing proportion)+(-.404*Pell proportion)+(-.044*STEM degree proportion) |

In the 2019 edition (release in fall 2018), our predicted grad rate was impacted by a source change of the Pell data. Prior years, this was taken from the DOE counts which included annual Pell numbers including Florida Tech Online ( $\mathrm{n}=2327$ ). This was re-sourced to IPEDS which was an annual number based on fall headcount and excluded Florida Tech Online ( $n=741$ ).

| Main Percent | Main | Sub-percent | Sub-metrics (Average in Rank Range) | Definition \& Source |
| :---: | :---: | :---: | :---: | :---: |
| 10\% | Student <br> Selectivity | 2.25\% | \% of freshmen in top 10 percent of high school class | Common Data Set - High School Class Standing: Please enter the percent of all degreeseeking, first-time, first-year (freshman) students who had high school class rank within each of the following ranges. "Freshman" includes all full- and part-time, first-time, firstyear students who enrolled in fall of 2018, including students who began studies during the summer, international students / nonresident aliens, and students admitted under special arrangements. |
|  |  | 7.75\% | SAT Math average score |  |
|  |  |  | SAT Evidence-Based Reading \& Writing average score | Average Test Scores: Please enter average test scores for all full- and part-time, first-time, first-year (freshman) students enrolling in the fall of 2018, including students who began studies during the summer, international students / nonresident aliens, and students admitted under special arrangements. Last year's data is provided for your reference. |
|  |  |  | Internal Calculation SAT Combined |  |
|  |  |  | ACT Composite average score |  |


| Main <br> Percent | Main | Sub-percent | Sub-metrics (Average in Rank Range) | Definition \& Source |
| :---: | :---: | :---: | :---: | :--- |
| $20 \%$ | Expert <br> Opinion | $20 \%$ | Peer assessment score | Collected from assessment surveys administered by US News. Sum of 1-5 ratings divide by |
|  |  | High school counselor score | number whate the institution. |  |


| Main Percent | Main | Sub-percent | Sub-metrics (Average in Rank Range) | Definition \& Source |
| :---: | :---: | :---: | :---: | :---: |
| 20\% | Faculty Resources | 1.0\% | \% of faculty who are full-time | Uses CDS data with AAUP definitions https://research.aaup.org/instructions |
|  |  | 3.0\% | \% of full-time faculty with PhD or terminal degree |  |
|  |  | 8.0\% | Class Size Indicator Rank | See class size indicator below |
|  |  | 7.0\% | Average Faculty Compensation (CY) | Uses AAUP data - <br> https://research.aaup.org/instructions |
|  |  | 1.0\% | Student/faculty ratio | Uses CDS data - <br> Report the Fall 2018 ratio of full-time equivalent students (full-time plus $1 / 3$ part time) to full-time equivalent instructional faculty (full time plus $1 / 3$ part time). In the ratio calculations, exclude both faculty and students in stand-alone graduate or professional programs such as medicine, law, veterinary, dentistry, social work, business, or public health in which faculty teach virtually only graduate-level students. Do not count undergraduate or graduate student teaching assistants as faculty. |
| Aggregated into Class Size Indicator |  |  | \% of classes with fewer than 20 students | Uses CDS data - <br> Class Sections: A class section is an organized course offered for credit, identified by discipline and number, meeting at a stated time or times in a classroom or similar setting, and not a subsection such as a laboratory or discussion session. Undergraduate class sections are defined as any sections in which at least one degree-seeking undergraduate student is enrolled for credit. Exclude distance learning classes and noncredit classes and individual instruction such as dissertation or thesis research, music instruction, or one-toone readings. Exclude students in independent study, co-operative programs, internships, foreign language taped tutor sessions, practicums, and all students in one-on-one classes. Each class section should be counted only once and should not be duplicated because of course catalog cross-listings |
|  |  |  | \% of classes with 20-49 students |  |
|  |  |  | \% of classes with 50 or more students |  |


| Main Percent | Main | Sub-percent | Sub-metrics (Average in Rank Range) | Definition \& Source |
| :---: | :---: | :---: | :---: | :---: |
| 10\% | Financial Resources | 10\% | Educational expenditures per student | IPEDS Finance (audited financials) - <br> U.S. News measures financial resources by using the average spending per student on instruction, research, student services and related educational expenditures in the 2017 and 2018 fiscal years. Spending on sports, dorms and hospitals does not count. <br> -Education expenses $=(($ research + public service $) *$ percent full-time equivalent enrollment that is undergraduate) + instruction + academic support + student services + institutional support. <br> -Educational expenses per student = education expenses / total full-time equivalent enrollment |

